

## ABSTRACT OF THE DISCLOSURE

A fuel pump and filter assembly for an internal combustion engine in which the fuel pump includes an enclosure, a piston assembly, and a coil assembly capable of operating the piston assembly at a frequency of between about 30 Hz and about 50 Hz to generate a fuel pressure of between about 5 psig and about 15 psig at a minimum flow rate of about 20 pounds of fuel per hour when the coil assembly is operated by a microprocessor sending a series of electrical impulses having a voltage of between about 8 volts direct current and about 14.5 volts direct current at a maximum RMS current of about 1,000 mA to the coil assembly.